

REMARKS

The following remarks form a full and complete response to the Office Action dated January 27, 2010. Claims 1 and 14 have been amended to further clarify the invention and added new claim 16. No new matter has been added. Support for the claim amendments and new claim can be found, *inter alia*, in paragraphs 18 and 33 of the published application and in claims 1 and 14 as filed. Claim 11 was previously withdrawn. Claims 1-16 remain pending and are submitted for reconsideration.

Double Patenting

The Office Action rejected claims 1-10 and 12-15 under the doctrine of obviousness-type double patenting as unpatentable over claims 8-27 of U.S. Patent No. 7,357,077 to Adamczyk et al. ("Adamczyk '077") and claims 1-24 of U.S. Patent Application Publication No. 2008/0290647 by Adamczyk et al. ("Adamczyk '647") in view of U.S. Patent No. 3,897,964 to Oka et al. ("Oka"). Applicants traverse the rejection on the basis that claims 1-10 and 12-15 are patentably distinct from the combination of claims 8-27 of Adamczyk '077, claims 1-24 of Adamczyk '647, and Oka.

Both Adamczyk '077 and Adamczyk '647 relate to blind embossing of bank notes that can be aligned with a colored imprinting of the bank note. See Adamczyk '077 at col. 4, line 57 – col. 5, line 18. In order to account for inaccurate alignment of the imprinting and the blind embossing, and imprinting via intaglio printing can be provided. *Id.* at col. 5, lines 39-47. As correctly stated in the Office Action, however, the claims of both Adamczyk '077 and Adamczyk '647 do not require any protective foil, such as the inventions recited by claims 1 and 14 require. See Office Action at 3. Moreover, neither

patent claims anything even remotely related to the maintenance of tactile perceptibility of an intaglio imprint when foil is added thereto. Nevertheless, the Office Action alleges that Oka can be used to remedy deficiencies of Adamczyk '077 and Adamczyk '647 with respect to the claimed invention. Applicants disagree.

Oka relates to an identification card having a base material onto which a colored layer 2 and pattern 3 are applied. See Oka at col. 3, lines 30 – 46 and FIG. 3. As shown in FIG 4, a transparent protecting layer 7 can be applied on top of the colored layer 2 and the pattern 3. *Id.* The colored layer 2 can also be produced by means of "gravure printing" or "relief printing." *Id.* at col. 5, lines 43-44. After application of the transparent protecting layer 7, holes 4, engraved parts 5, and un-engraved parts 6 are produced by engraving through the protecting layer. *Id.* at col. 3, lines 30-47. As the Office Action correctly points out, Oka fails to disclose anything relating to the maintenance of tactile perceptibility of an intaglio imprinting, as claims 1 and 14 require. See Office Action at 11. Accordingly, the combination of claims 8-27 of Adamczyk '077, claims 1-24 of Adamczyk '647, and Oka fails to disclose or suggest a protective foil that is applied such that the tactile perceptibility of the intaglio imprinting or of the print is maintained, as claims 1 and 14 require. Applicants, therefore, respectfully request the withdrawal of the obviousness-type double patenting rejection.

Claim Rejections Under 35 U.S.C. §§ 102 and 103

Tompkin

The Office Action rejected claims 1-6, 9-10, 12, and 14-15 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative under 35 U.S.C. § 103(a) as obvious

over U.S. Patent No. 6,060,143 to Tompkin et al. ("Tompkin"). Applicants traverse the rejection on the basis that claims 1-6, 9-10, 12, and 14-15 recite subject matter neither disclosed nor suggested by Tompkin.

Independent claim 1 recites a data carrier having a first side and a second side. The data carrier includes at least one printed area produced by imprinting via intaglio printing on the first side and having a tactile perceptibility produced by the imprinting. The printed area has a printing relief of approximately 5 to 100 microns. The data carrier also includes a protective foil that is applied on the first side partly covering the printed area. The protective foil is applied such that the tactile perceptibility of the intaglio printing is maintained.

Independent claim 14 recites a data carrier having a first side and a second side. The data carrier includes a substrate having an area containing print, which is printed in raised relief and having a tactile perceptibility. In addition, the data carrier includes a protective foil that is applied to the first side of the data carrier such that a window area is maintained over at least a portion of the area containing the print so that the tactile perceptibility of the print is maintained.

Tompkin relates to an "optical information carrier" having optically variable structures. See Tompkin at Abstract. For example, according an embodiment, a carrier foil 3 is provided with a relief structure (15, 10) at both sides. See *Id.* at col. 3, line 47 - col. 4, line 37. These relief structures are in turn provided with layers 8, 9. *Id.* at col. 6, line 12. These optical layers provide "optically effective structures" 6, 7. See *Id.* at col. 2, lines 26-20 and col. 6, line 12. The lower layer 8 is entirely metalized, whereas the upper layer 9 is only partly metalized and provided with openings 17 through which light

can pass. Light entering through this opening is reflected and diffracted by the metalized layers 8 and 9 at least once, before it exits through opening 17, again. Thus, a special effect is provided.

Tompkin, however fails to disclose or suggest a printed area produced by imprinting via intaglio printing on the first side and having a tactile perceptibility produced by the imprinting, as required by claim 1. The Office Action suggests that Tompkin discloses this feature of claim 1, but it does not.

According to Tompkin, the "structures 7" (i.e., the structures at the bottom side according to the reference numbers) can be imprinted in order to avoid certain diffraction effects at the relief structure 15 (i.e., the relief structure at the top side according to the reference numbers). From the disclosure of Tompkin, however, it is abundantly clear that the relief structure 15 at the top side can also be provided in such a way that it yields diffraction effects when light is incident onto it from the top side or, alternatively, be provided with a colored layer at its top side in order to avoid this effect. See Tompkin at col. 4, lines 21-30. Tompkin simply does not disclose a printed area produced by imprinting via intaglio printing and having a tactile perceptibility produced by the imprinting, as claim 1 requires.

The Office Action appears to suggest that the effects of the intaglio printing need not be considered in determining the patentability of the claim because the claims are product-by-process claims. See Office Action at 5. As Applicants have previously pointed out, though, claim 1 is not a product-by-process claim. See Applicants' Reply to the Office Action of May 19, 2009, at 16-17; *3M Innovative Pros. Co. v. Avery Dennison Corp*, 350 F. 3d 1365, 1374 (Fed. Cir. 2003) (finding the term "embossed" in a claim to

be "entirely structural" because the patentee described "embossed" as having certain characteristics."). In the case of the present application, the term "intaglio printing," describes a characteristic of a certain kind of print in functional terms and does not just recite a process by which the print is made. As explained in the Specification, an intaglio imprint has a comparatively thick ink layer and partial deformation of the paper surface which is easily palpable manually even to the layman. See Specification at ¶ 9. The term "intaglio printing," therefore, imposes a structural limitation on claim 1 and must be shown in the prior art in order to render claim 1 either anticipated or obvious.

However, even if claim 1 were a product-by-process claim the Office, as Applicant has previously pointed out, would still have to show the presence of the structure that results from the intaglio printing – i.e, an intaglio imprint – must still be considered when assessing the patentability of the claims. See MPEP § 2113. The Office has not done so in this case because it cannot do so; the prior art simply fails to disclose or suggest this feature of claim 1. The Office Action, in fact acknowledges this point. See Office Action at 6 (noting that Tompkin does not teach "intaglio printing or tactile perceptibility of the printed relief layers or its thickness."). The rejection of claim 1 is, therefore, improper and should be withdrawn for this reason alone.

Claim 1 is also patentable for the separate and independent reason that Tompkin fails to disclose or suggest a protective foil that is included without reducing the tactile perceptivity of the intaglio imprinting, as required by claim 1. Instead, Tompkin discloses an upper layer 9 having a thickness between 20 and 70 nm. See Tompkin at col. 8, line 56. A person of ordinary skill in the art would understand that the upper layer would not be able to reliably protect the data on the document of value from attempts at

tampering. See Specification at ¶ 33. That is, upper layer 9 cannot, function as and is not equivalent to the protective foil required by claim 1. The rejection of claim 1 is, therefore, improper for this additional reason.

Applicants submit that the rejection is improper and, therefore, respectfully request the withdrawal of the rejection of claim 1. Claims 2-6, 9-10, and 12 depend from claim 1 and are patentable for at least the same reasons as claim 1 as well as for the additional features they recite. Applicants, therefore, respectfully request the withdrawal of the rejection of claims 2-6, 9-10, and 12 also.

Similarly to claim 1, independent claim 14 requires a print that is printed in raised relief having a tactile perceptibility. However, as discussed above, Tompkin fails to disclose or suggest this feature of claim 14. Claim 14 also requires a protective foil applied to the first side of the data carrier such that a window area is maintained over at least a portion of the area containing said print so that the tactile perceptibility of said print is maintained. Tompkin also fails to disclose or suggest this feature of claim 14. The rejection of claim 14 is, therefore, improper and should be withdrawn. Claim 15 is patentable for at least the same reasons stated above with respect to claim 14, from which it depends, as well as for the additional features it recites. Applicants, therefore, respectfully request the withdrawal of the rejection of claim 15 also.

Tompkin in view of Ichikawa or Jackson

The Office Action rejected claims 1-6, 8-10, 12, and 14-15 under 35 U.S.C. § 103(a) as unpatentable over Tompkin in view of U.S. Patent No. 3,980,018 to Ichikawa ("Ichikawa") or U.S. Patent No. 5,915,731 to Jackson ("Jackson"). Applicants

traverse the rejection on the basis that claims 1-6, 8-10, 12, and 14-15 recite subject matter neither disclosed nor suggested by the combination of Tompkin and Ichikawa or Jackson.

Claims 1-6, 8-10, 12, and 14-15 are patentable over Tompkin alone for the reasons stated above. The Office alleges that Ichikawa or Jackson can cure the deficiencies of Tompkin with respect to the claimed invention. Applicants disagree because neither Ichikawa nor Jackson remedies the deficiencies with Tompkin noted above.

Ichikawa relates to an intaglio printing process that utilizes a printing plate consisting of a precise engraving element that is adapted from a gravure printing plate. See col. 1, lines 14-16. Jackson relates to a security document with embossing or engraving. See Jackson at col. 1, lines 45 – 50. Neither Ichikawa nor Jackson, however, remedies the deficiencies noted above with respect to Tompkin. For instance, neither Ichikawa nor Jackson discloses or suggests a protective foil applied on the first side of a data carrier partly covering the printed area, such that the tactile perceptibility of the intaglio printing is maintained, as required by claim 1 and as lacking from Tompkin. The rejection of claim 1 is, therefore, improper and should be withdrawn.

Applicants, therefore, respectfully request the withdrawal of the rejection of claim 1. Claims 2-6, 9-10, and 12 depend from claim 1 and are patentable for at least the same reasons as claim 1 as well as for the additional features they recite. Applicants, therefore, respectfully request the withdrawal of the rejection of claims 2-6, 8-10, and 12 also.

Similarly to claim 1, independent claim 14 requires a protective foil applied to the first side of the data carrier such that a window area is maintained over at least a portion of the area containing said print so that the tactile perceptibility of said print is maintained. However, as discussed above, Tompkin fails to disclose or suggest this feature of claim 14. The rejection of claim 14 is, therefore, improper and should be withdrawn. Claim 15 is patentable for at least the same reasons stated above with respect to claim 14, from which it depends, as well as for the additional features it recites. Applicants, therefore, respectfully request the withdrawal of the rejection of claim 15 also.

Tompkin in view of Ichikawa or Jackson and Schneider

The Office Action rejected claim 7 under 35 U.S.C. § 103(a) as unpatentable over Tompkin in view of Ichikawa or Jackson, as applied to claim 1, and further in view of U.S. Patent No. 6,474,695 to Schneider et al. ("Schneider"). Applicants traverse the rejection on the basis that claim 7 recites subject matter neither disclosed nor suggested by the combination of Tompkin, Ichikawa, Jackson, and Schneider.

Claim 7, which depends from claim 1, is patentable over Tompkin, Ichikawa and Jackson for at least the same reasons stated above with respect to claim 1. Schneider, which the Office Actions for its purported disclosure of "optically effective structures such as embossed holograms or diffraction or relief structures to affect the different viewing angles and coloring," fails to remedy any of the above-identified deficiencies that Tompkin has with respect to the claimed invention. Accordingly, the rejection of

claim 7 is improper and should be withdrawn. Applicants, therefore, respectfully request the withdrawal of the rejection of claim 7.

Tompkin in view of Ichikawa or Jackson and Heckenkamp or Roule

The Office Action rejected claim 2 under 35 U.S.C. § 103(a) as unpatentable over Tompkin in view of Ichikawa or Jackson, as applied to claim 1, and in further view of U.S. Patent No. 5,433,807 to Heckenkamp et al. ("Heckenkamp") or U.S. Patent No. 4,715,623 to Roule et al. ("Roule"). Applicants traverse the rejection on the basis that claim 2 is patentable over the combination of Tompkin, Ichikawa, Jackson, Heckenkamp, and Roule.

Claim 2, which depends from claim 1, is patentable over Tompkin, Ichikawa, and Jackson for at least the same reasons stated above. Heckenkamp and Roule are cited for their purported disclosure of adding "further depths of security." Neither Heckenkamp nor Roule, however, discloses the features of claim 1 missing from Tompkin, Ichikawa, and Jackson. Accordingly, claim 2 is patentable over the combination of Tompkin, Ichikawa, Jackson, Heckenkamp, and Roule. Applicants, therefore, respectfully request the withdrawal of the rejection of claim 2.

Oka and Gauch

The Office Action rejected claims 1-10 and 12-15 under 35 U.S.C. § 103(a) as unpatentable over Oka in view of U.S. Patent No. 4,325,196 to Gauch et al. ("Gauch"). Applicants traverse the rejection on the basis that claims 1-10 and 12-15 recite subject matter neither disclosed nor suggested by the combination of Oka and Gauch.

Oka, as noted above, fails to disclose anything relating to the maintenance of tactile perceptibility, as claims 1 and 14 require. See Office Action at 11. Nevertheless, the Office Action suggests that Gauch teaches this feature of claims 1 and 14. It does not.

Gauch relates to a lamination device having lamination plates 8 covered with a soft layer 9 (see also figure 3), such that a signature stripe 6, which is provided with a relief can be laminated onto an identification card, without destroying the relief. See Gauch at col. 3, lines 6-54. The relief can for example be imprinted or cold embossed and is tactile. *Id.* at col. 3, line 29. Applicants submit, however, that the combination of Oka and Gauch would not lead one to the claimed invention. Specifically, a person of ordinary skill in the art would understand that Oka and Gauch would not be combined to provide a tactile relief on the color layer 2 of Oka since the signature stripe 6 of Gauch is not embedded between the layers of the identification card, but applied to the outer side of the identification card.

Additionally, neither Oka nor Gauch discloses or suggests applying the transparent protective layer 7 of Oka in such a way that a tactile relief produced by the colored layer remains tactilely recognizable. While Oka may describe, a relief that is produced after the application of the protective layer by the engraving of the relief, wherein a relief of the colored layer is produced, as well, col. 3, lines 41-42 independent claims 1 and 14 require that the tactilely recognizable relief is a relief produced by the imprinting (via intaglio printing). This excludes something like the relief described by Oka, which is produced by a subsequent engraving process instead of imprinting via

intaglio printing or printing in raised relief as claims 1 and 14 require. Independent claims 1 and 14 are, therefore, patentable over the combination of Oka and Gauch.

Applicants, therefore, respectfully request the withdrawal of the rejection of claims 1 and 14. Claims 2-10 and 12-13 depend from claim 1 and claim 15 depends from claim 14. Claims 2-10, 12-13 and 15 are, therefore, patentable for at least the same reasons stated above with respect to claims 1 and 14 as well as for the additional features they recite. Applicants, therefore, respectfully request withdrawal of the rejections of claims 2-10, 12-13 and 15 also.

Oka, Gauch, Ichikawa, and Jackson

The Office Action rejected claim 5 under 35 U.S.C. § 103(a) as unpatentable over Oka in view of Gauch, as applied to claim 1, and further in view of Ichikawa or Jackson. Applicants traverse the rejection on the basis that claim 5 recites subject matter neither disclosed nor suggested by the combination of Oka, Gauch, Ichikawa, and Jackson.

For instance, claim 5 is patentable for at least the same reasons stated above with respect to claim 1, from which it depends. Indeed, as discussed above, claim 1 (and consequently claim 5) is patentable over each of the Oka, Gauch, Ichikawa, and Jackson reference both alone and in combination. Applicants, therefore, respectfully request the withdrawal of the rejection of claim 5.

New Claim

Applicants have added new independent claim 16. Similarly to independent claims 1 and 14, claim 16 recites a data carrier having at least one printed area including an intaglio imprint on the first side and having a tactile perceptibility. Claim 16 recites a protective foil applied on the first side and partly covering the printed area, wherein the protective foil is applied such that the tactile perceptibility of the intaglio imprint is maintained. For the reasons stated above with respect to claims 1 and 14, these features are not taught by the prior art. Claim 16, is, therefore, patentable. Applicants respectfully request allowance of new independent claims 16.

CONCLUSION

In view of the above, Applicants submit that the application is now in condition for allowance and request that the Office allow claims 1-10 and 12-16 and pass this application to issue.

In the event that this paper is not timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account No. 02-2135.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

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